October, 1953

THE CHEMIST

VOLUME XXX NUMBER 10

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(See page 459)

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Placement After Middle Life, Dr. Lincoln T. Work, F.A.I.C.

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TO COME

The November issue of THE CHEMIST will stress career information, both for the beginner in the profession and for those who want to advance more rapidly. Among the papers in this issue will be "A Scientific Approach to Professional Progress," by Dr. Robert F. Moore; "The Creative Thinking Process, by Dr. Elliott R. Danzig, "The Chemist and His Profession" by Dr. Henry B. Hass. Also for this issue, President Work has written the article that up to now has never been written. Entitled, "Placement After Middle Life," it competently analyzes the situation of the older man who finds himself, through no fault of his own, looking for a new position, and tells him what he can do about it. The advice is sound and effective. Other information of career interest to young people has brought a request for extra copies of this issue to be sent to placement directors in various colleges and universities.

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EDITORIAL

Use Your Committees

Dr. Lloyd Van Doren, F.A.I.C.

Secretary, The American Institute of Chemists, Inc., 60 E. 42nd St., New York 17, N. Y.

THE AMERICAN INSTITUTE OF CHEMISTS appoints committees to consider, study, and make recommendations to the Council and to the members on many important professional matters, such as professional education, manpower, employer-employee relations, national legislation, ethics, and patents. The AIC members on these committees are conscientious, well-qualified persons who give precious time from busy lives to serve the INSTITUTE and its members, and indirectly, the whole chemical profession.

The individual ideas and problems of AIC members are usually not confined to one chemist's experience but are representative of matters that affect many chemists. To bring these individual matters to the attention of the appropriate committee may make it possible for the committee to do something about problems that concern not one but many chemists.

Recently we received the following letter from a member:

> "I have come to realize that I am not a professional. Granted that when I am fired without termination pay by the _____ company, that possibly the company may have had justification — at least in the light of its own moral scruples; however, when employment applications from several of the large corporations in this country (_____ company, for example) have some fine print in the application, by which the applicant waives all right to dismissal pay even before he is employed, or when _____ Inc., sends me to a distant city and then due to their "error" offers eight hours pay and only one day's field expense, in lieu of notice and compensation for actual time spent in traveling and loss of earnings while out of the city . . . obviously I am not a professional but a hired hand, to be hired and fired by the hour."

This member should have sent the facts, at the time of the occurance of his unfortunate experience, and copies of the employment contracts which he had observed, to the Committee on Employer-Employee Relations for its attention. Especially does the matter of waiver of dismissal pay apply to all chemists employed by companies reputed to have such a clause in the contracts.

The current committees of the INSTITUTE are listed below. Pertinent information should be sent to the attention of the appropriate committee. A letter addressed to any committee may be sent to the Secretary's office for prompt forwarding.

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Our New Councilors

DR. HARRY L. Fisher, Dr. Harry N. Holmes, and Dr. Charles L. Thomas — these three were elected councilors of THE AMERICAN INSTITUTE OF CHEMISTS to serve for terms expiring in May 1956.

Dr. Fisher, Hon. AIC, was born In Kingston, N.Y., January 19, 1885. He received the A.B. degree from Williams College and the A.M. and Ph.D. degrees from Columbia University. He has taught at Cornell and at Columbia; worked as research chemist for Goodrich Rubber Co., and for U.S. Rubber Company, and has directed organic research for U. S. Industrial Chemicals Company. He served as special assistant to the director of the Office of Synthetic Rubber, Reconstruction Finance Corporation, until 1953, when he moved to Los Angeles to be professor of rubber technology at the University of Southern California. His great personal charm, sympathetic understanding, and desire to help others have enriched his life with many friends who give him opportunity to serve in professional positions. He has been president of Phi Lambda Upsilon; president of the AIC from 1940 to 1942, and he is currently president-elect of the American Chemical Society. He has worked on many committees of these and other organizations. Honors in addition to working positions have also come to him. He has received a Modern Pioneer Award; been Edgar Marburg Lecturer of the American Society for Testing Materials, and has received the Charles Goodyear Medal of the Rubber Division of the American Chemical Society.

Dr. Holmes, Hon. AIC, who was born July 10, 1879 in Laurence County, Pa., received the B.S. and M.S. degrees from Westminster Col-

lege, and the Ph.D. degree from Johns Hopkins University. He was head of the chemistry department at Earlham College until 1914, when he went to Oberlin College, Oberlin, Ohio, where he is now professor of chemistry and head of the department. Here he has become noted for his publications, both textbooks and popular books, and for his extensive researches in the field of vitamins and colloids. Beloved by his many students and friends, he is best described in the words of Dr. Fisher, (see above) who presented the Gold Medal of THE AMERICAN INSTITUTE OF CHEMISTS to him in 1951, with this citation:

"Friend of young men and of old men
Superb and enthusiastic teacher, sharing gladly your knowledge of men and the science of chemistry
Writer of extraordinary textbooks
Painter for personal satisfaction
Hobbiest *par excellence*
Worker in the societies in which you have been a member; former president of the American Chemical Society
Renowned for human dignity and scientific endeavor . . ."

Dr. Thomas, F.A.I.C., was born Oct. 13, 1905, in Hendersonville, N. C. He received the B.S.Ch. and M.S. degrees from the University of North Carolina, and the Ph.D. degree from Northwestern University. He has been associate director of research for Universal Oil Products and director of research of the Great Lakes Carbon Corporation. Now he is a member of the research and development staff of Sun Oil Company, Philadelphia 3, Pa. He is the author of many technical articles in the petroleum and related fields and holds a number of patents. He is active in scientific and professional societies. He was formerly vice chairman of the Petroleum Division and chairman of the Chicago Section of the American Chemical Society. He was an active worker and former secretary-treasurer of the Chicago AIC Chapter. Intelligent and cooperative, he too realizes that the profession of chemist deserves the fullest recognition, if it is to serve mankind to the best of its ability.

Conference: On Analytical Chemistry and Applied Spectroscopy, to be held at the William Penn Hotel, Pittsburgh, Pa., from March 1-5, 1954. Contributed papers are welcome on all phases of analytical chemistry and instrumental analysis. Please submit abstract by November 20th to R. G. Russell, Program Chairman, Gulf Research & Development Co. P. O. Drawer 2038, Pittsburgh 30, Pa.

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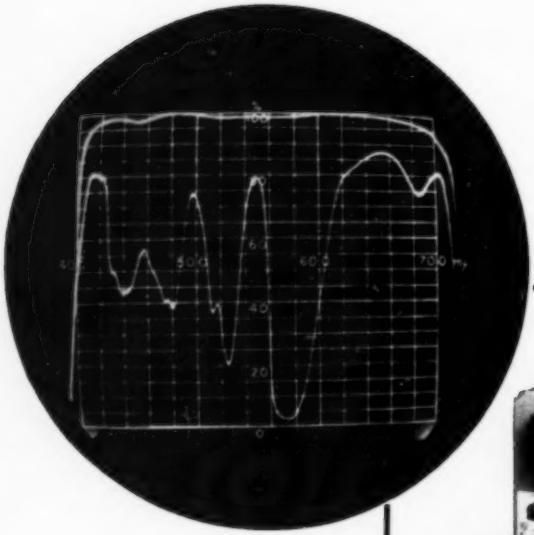

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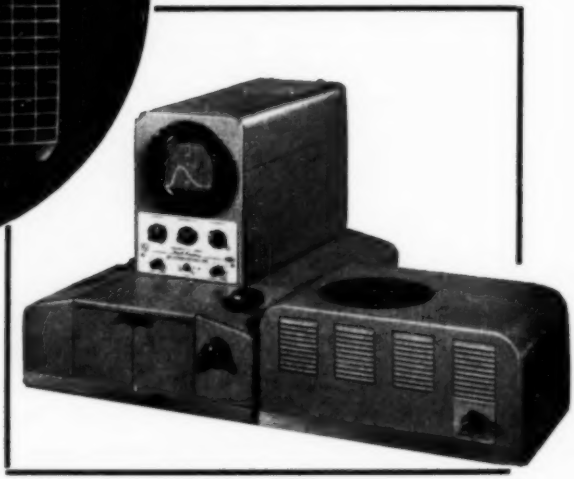

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The Professor and His Public

Dr. J. C. Warner, Hon. AIC

President, Carnegie Institute of Technology, Pittsburgh 13, Pa.

(Excerpts from a talk given at the Symposium on Public Relations for Chemists, held jointly by The American Institute of Chemists and the American Chemical Society in New York, N. Y.)

THE professor has a number of important "publics": his students, his colleagues in his chosen field throughout the nation and the world, the leaders in business and government in his community, and, in broad sense, the citizens of his community. Professors, if they have the qualifications which they should have to be professors, can win respect and admiration and they can be a powerful influence for good in America, if they recognize these publics and give proper attention to their relations with them. Some of the reasons for misunderstandings between Town and Gown are differences in point of view, lack of mutual understanding, and something less than complete mutual confidence.

One reason why town and gown relations have been hampered is that the scholar-teacher's function is to discover new knowledge as well as to disseminate knowledge, so that he is bound to be an innovator, while many leaders in the community around him are interested in preserving the *status quo*. Town and gown differences are likely to be intensified in times of stress, such as the United States has experienced for the past quarter century. Internally the country has been worried about depressions, inflation, subversion and big government, while externally it has feared aggressive world Communism and the infliction of Fascist regimes on many people who formerly were free.

Today a goodly number of professors in the social sciences, humanities, law and theology are accused of being too leftish to serve the best interests of our society, if not downright subversive, and a few professors in the physical and social sciences are likewise accused or under suspicion. The recent announcement of a Congressional investigation of campus subversives is an example of poor relations between town and gown. Both sides should show better understanding in the interests of the welfare, preservation and progress of our free society.

It is the college professor's right, and indeed his duty, to speak out on public issues, but the professor must know what he is talking about, and he must not claim "academic immunity" for what he says. Educators

should pay as much attention to academic responsibility as they pay to academic freedom. The public should let the colleges hunt out their own subversives, fellow-travelers and incompetents, lest loyal teachers who happen to be unorthodox suffer for the sins of a subversive few. While I am sure our professors are not universally and to a man without a blame, I'm convinced that the vast majority of them are extremely loyal citizens devoted wholeheartedly to the preservation of our free society and to the attainment of the goals of western civilization.

There will be no academic freedom unless society has confidence in our scholars and teachers. If professors conscientiously accept academic responsibility, society will have confidence in higher learning and the professors will enjoy academic freedom.

Academic responsibility implies that the professor cannot claim academic immunity for his statements inside or outside the laboratory. He cannot expect to have his university connection and responsibilities ignored in judging his public utterances and behavior; all sides of a controversial question must be presented. He must teach and not indoctrinate. He must not use his classes as captive audiences for advocating his own subjective views, and he must be willing to take part in evaluating the competence, reliability and responsibilities of his fellow professors.

The professor should not assume or pretend that just because he has deservedly earned a great reputation as an authority in some scholarly field, such as physical chemistry, he can without objective study make an authoritative pronouncement about the proper solution to a public problem and that his opinion thus given has any more value than the snap judgment of the ordinary citizen.

Professors, of course, have all the rights and responsibilities of other citizens and hence should play an active part in the solution of public problems. Indeed, it seems to me that the professors have a special obligation because part of their job is to see to it that oncoming generations of students develop such disciplines and such sets of moral, ethical and spiritual values as will serve them well in finding solutions to the problems they encounter as citizens. I do not believe the professor can fulfill this obligation without himself accepting an active role as a citizen. I only ask that the professor study public problems before he states his conclusions and that he bring to his study the same objective attitude he practices as a scholar.

Professors of science and engineering have a special obligation to become more literate in the areas of government, business and human relations, because modern society is based more and more upon science and technology and public problems

more and more frequently can be solved only with the help of technically trained citizens.

The Gown should make a more positive effort to understand the achievements of Town, which has been bold, venturesome, hard-working and efficient in applying scientific knowledge to the development of a productive system that provides a high standard of living and an opportunity for scholarly and creative work that was undreamed of a century ago.

Similarly Town should have more patience with Gown and attempt the same effort at understanding that I have advocated for the professors. Town should let Gown hunt out its own subversives, fellow-travelers and incompetents. This will always take time, but Town must recognize that Gown does not have access to F.B.I. files, nor the prerogatives of the courts or the prosecutors. A study of history should convince Town that just as a "few fleas are good for a dog", some heresy or unorthodoxy has been good for our institutions and has led to progress in our civilizations. I believe Town should make a real effort to understand the difference between heresy and subversion. We need not fear heresies but we cannot, of course, tolerate subversion.

In the aggregate, the support a university receives depends on the public relations of its professors, and on a national scale the esteem with which professors as a class are regarded by society will determine the extent to which society will value higher education and scholarship and support institutions that provide them.

The Role of Industry in the Public Relations Activities of the Chemist

(An Abstract)

Robert B. Semple, F.A.I.C.

President, Wyandotte Chemicals Corporation, Box 111, *Wyandotte, Mich.*

(Abstract of a paper presented at the Symposium on Public Relations for Chemists)

INDUSTRY, to its neighbors, its customers, its shareowners and its workers, is much more than a local source of revenue, a supplier, a dividend check, or a pay voucher. Industry is the shadow of a man or a group of men. As this man or these men do, so does industry and as they are regarded, so is industry.

In our industries — chemical and chemical process — many of our men are chemists or chemical engineers. Therefore, the chemist and the engineer must be fully conscious of their community and other public relations responsibilities, both from the stand-

point of their obligation to the company with which they are associated and the importance of such actions to their individual advancement and recognition.

As a company and the individuals which make it up work toward good objectives, they progress together. And as many companies and groups of individuals within an industry raise their sights and travel toward new and brighter horizons, that industry moves ahead.

Each company in our industry has an obligation to assist its chemists and other professional groups to attain greater recognition. This breaks down four ways:

1. To foster the internal development of the individual within the industry.
2. To encourage his general technical development.
3. To improve the industry's relationship with the community.
4. To broaden the individual's relationship with the community.

Starting Salaries: Earned by 1952 graduates of Columbia University of Engineering averaged $4000 yearly. This year's graduates expect to start at about $4300, according to a survey made by the *Columbia Engineering Quarterly*. These figures cover graduates with only the B.Sc. degree. Those with a Master's degree started at an average $500 a year more. 1950 graduates averaged between $3000 and $3500; those of the Class of 1951 between $3500 and $4000. Of the survey group (688 questionnaires), 71 per cent were still with the companies they joined upon graduating. The rate of turnover was lowest among chemical engineering graduates and highest among civil engineers.

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Honored: Dr. Charles N. Frey, F.A.I.C., 45 Cambridge Road, Scarsdale, N. Y., consultant and lecturer at Massachusetts Institute of Technology, with the Stephen M. Babcock Award for 1953, by the Institute of Food Technologists, in recognition of his long and distinguished career in food science and his zeal in promoting nutritional and other forms of biochemical research, including technological applications.

New Position: Dr. Francis R. Holden, F.A.I.C., has joined the chemistry staff of Stanford Research Institute, Stanford, Calif. He was formerly at the Hunter's Point laboratory of the Navy, and with Mellon Institute.

How the Exposition of Chemical Industries Advances the Profession

Charles F. Roth, F.A.I.C.

Manager, Exposition of Chemical Industries, Grand Central Palace, New York 17, N. Y.

(This special contribution to THE CHEMIST also serves to remind chemists and chemical engineers that the 24th Exposition of Chemical Industries will be held at the Commercial Museum & Convention Hall, Philadelphia, Pa., November 30th to December 5th.)

THE Exposition of Chemical Industries has been a leading institution in the chemical industries and the chemical profession for thirty-eight years. It was created in 1915 to show the ability of this country to provide the necessary materials, apparatus, equipment, men, and companies able to produce. It opened visions even for the technical men who should have had this knowledge. The exposition was an annual event then and in those first few Expositions, men of knowledge came, saw and decided upon the equipment and materials they could use. Companies whose names have become great in the roster of the industries were created in the halls of the exposition. Many today are the leaders in their own fields.

Support to the Young Industry

In the years following the first world war, our country was in an extremely vulnerable economic condition in meeting competition from abroad, but those who had the enterprise to create also had faith in the possibility that our government would assist with the required laws to protect the young industry. In this difficult period, the exposition contributed in no small measure to convince the people and our legislators that protection was necessary if we were to remain a self-contained industrial nation, with our industry so largely dependent on chemists and chemical industry.

To create the industry was an important necessity; to assure its continuance through legislative protection was an important struggle; without vigilance and continuous promotion of the new products, there could have been no survival for it in the competition by other nations to recover the American market after peace came.

Many young men who visited the exposition during these years realized the visions it forecast and they pursued the ideas it inspired. Many became the pioneers and leaders in their profession and industries. Many have felt the need to refresh their technical knowledge; they know well that

this can be accomplished in various ways; by the devotion of time and money to further study in their chosen work. But this procedure may involve more than they are willing to invest. A quick means to visualize their purpose is the investment of time and expense to visit and examine the exhibits in these Expositions. Such visitors always return to their employment and profession refreshed, inspired, and eager to proceed with new ideas to advanced accomplishments.

In 1925, the Exposition was changed from an annual event to a biennial, and while previously it had been open to the general public, it was now open only to its special professional and industrial visitors and those related or associated therewith. Registration of this special professional, industrial and associated attendance began in 1925 and has continued since then. This special attendance numbers to 45,000.

Throughout the period of the Expositions, meetings of the technical societies have been held, but the exposition is so intensely a living institution that a usual meeting has difficulty to contain its assemblage. For this reason organized meetings over the week are not advocated. Special, purposeful meetings topically timed will maintain an attendance and usually leave a deep impress upon the audience.*

Educational Value

The interest of college students and their instructors was evidenced in the early years but it was found necessary to place some control upon their attendance. The Advisory Committee of the exposition desired that the most seriously interested students of chemistry in colleges and universities of recognized standing should benefit by the unusual opportunities offered. They recognized the need of limiting this attendance to the two upper classes and graduate students, thereby giving this extra curricular study advantage to them while they were still under the guidance and counsel of their instructors. Special programs of leaders and specialists were prepared for them.

So valuable did these programs prove to the students and their instructors and professors, that a special Student Course, which could be taken throughout the week or for a selected number of days, was continued in each Exposition, except during the years of the Second World War, under the chairmanship of Dr. William T. Read, F.A.I.C., a member of the Exposition Advisory Committee. This year a limited number of students will again be invited and their study of the Exposition will be under the direc-

* The Exposition assisted The American Institute of Chemists during its formative years by contributing space during the show where the AIC could meet members of the profession and disseminate information regarding its objectives. These occasions were in the years of 1923, 1929, 1931, 1933, 1935, 1939, 1941, and 1946.

tion of Dr. Read. The heads of chemistry and chemical engineering departments will write to the Exposition Management, giving the names of selected students and with whom they will be accompanied so that cards for admission and detailed arrangements may be provided. Reports of earlier courses have been made by Dr. Read in the technical journals.

The 1953 Exposition

In the first 1915 Exposition there were eighty-three exhibitors. This increased to four-hundred and twenty-five in 1921. During the period of adjustment through which our country passed after the conclusion of hostilities this number varied from three-hundred and eight to three-hundred and eighty-two, and since 1929 the size of the Exposition has been limited by the amount of space available in the building occupied. This year with greater space in the new location, Commercial Museum and Convention Hall, Philadelphia, the number now is close to five-hundred.

The scope of the Exposition will be broadened this year by the increased size and number of the displays. Many of them will include active demonstrations of commercial units; others too large for actual operation will be demonstrated by pilot plant sizes or in miniature. The exhibitors will have specialists and trained men attending who can discuss their demonstrations and offer solutions to the problems of serious visitors.

Reports from exhibitors of the diversity of products they will display this year are not complete but sufficient have indicated a wide range, from laboratory apparatus, equipment, supplies, chemical engineering equipment and materials, construction materials of innumerable variety, chemical and industrial products in metal, plastics, special textiles and fabrics for industry, machinery for a wide range of plant operation, books, publications, consulting and technical services, to mention just a few in a great galaxy.

A new exhibitor coming to this forthcoming Exposition has written:

> "We are looking forward to participating in what we have been told is one of the outstanding Industrial Expositions in the country."

This is not an exception; similar quotations in vast number could be made over the years. An exhibitor is accepted in the Exposition because his exhibit has a purpose for the profession and the industries which the exposition serves and contributes something for the progress of either or both.

Vice President: Robert A. Pollock, F.A.I.C., elected to that position by Brown-Allen Chemicals, Inc., Port Richmond, Staten Island 2, N. Y.

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Commercial Research Laboratories in America and Europe

Dr. Roger W. Truesdail, F.A.I.C.

President, Truesdail Laboratories, Inc., 4101 No. Figueroa St., Los Angeles, California

(An abstract of a talk presented before the Los Angeles AIC Chapter.)

THERE are over five-hundred independent commercial laboratories staffed with more than seven-thousand five-hundred scientists in this country. The majority of this group undertake research and development work upon either a short term basis or an extended research program. They have the advantage of calling into consultation for the solution of a problem, qualified scientists who are practical specialists in their particular fields. This permits the most economical solution of the problem. Being entirely independent tax-paying organizations, all research information is the exclusive property of the client.

The commercial laboratories vary in staff size from approximately seven-hundred down to several. The oldest one in this country was established eighty-seven years ago in San Francisco when its founder, Henry G. Hanks, started development of new methods for refining borax. A number of laboratories have served American industry for over fifty years. Each laboratory tries to serve adequately the geographical area in which it is located although some of the larger laboratories have branches with nation-wide coverage as well as representation in some foreign countries. Each, in addition to its general services has developed certain specialties which may serve a much larger area than its immediate location.

Many of the industrial giants of today were nursed as infants by the commercial laboratories. A number of case reports are recounted of the role the commercial laboratories have had in industrial development in the United States.

A trip by the author through nine European countries last Fall disclosed that their commercial laboratories and private consultants are not faring so well. Norwegian, Swedish, Swiss and Belgian industry does not have a single commercial laboratory to call upon. Sweden once had a number of independent commercial laboratories but with the growth of socialism, the universities and government-supported institutions have taken over all research, development, testing and routine laboratory work until today not a single independent laboratory remains. Switzerland has one engineering consultant but no commercial laboratories. Research,

development and testing are controlled by universities and by the local government or canton laboratories. Belgium has one engineering consultant.

In Holland there are about thirty Dutch consulting laboratories that operate similarly to those in America. The British Isles have about one-hundred and fifty consultants, most of whom own their own laboratories.

On the Continent, distrust as much as any other factor accounts for the scarcity of commercial laboratories. One Brussels industrialist stated, "Business executives won't trust a laboratory to keep their secrets. They are afraid that the laboratories would sell out to their competition. Over here no one trusts anyone else."

The commercial laboratories in America have technical staffs consisting of chemists, engineers, geologists, physicists, technicians, economists librarians, etc. The chemists may be organic, analytical, microanalytical, nuclear, biological, agricultural, food, textile, oil, cereal, physiological, vitamin, racing, petroleum, marine, ceramic, rubber, electro-chemists and assayers.

No single laboratory will have all this staff. However, this does give young chemists a concept of the range of professional opportunities which may be open to them upon completion of their undergraduate or graduate studies, if they wish to affiliate with an independent commercial laboratory.

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Golden Anniversary: Celebrated this year by the Pittsburgh Section of the American Chemical Society. An anniversary banquet was held September 17th. Participants in an afternoon Symposium on "The Principal Functions of American Research Institutions," were Dr. Clyde Williams, F.A.I.C., Raymond Stevens, F.A.I.C., Eger V. Murphree, Dr. Herbert E. Longenecker, F.A.I.C., and William A. Gruse. Dr. Edward R. Weidlein, Hon. AIC, director of Mellon Institute, spoke at the banquet on "Pittsburgh as a Research Center." Dr. J. C. Warner, Hon. AIC, was toastmaster. Chester G. Fisher, author of the "History of the Pittsburgh Section," spoke on the section's half-century of progress.

Growth: Edwal Laboratories, Inc., now known as Ringwood Chemical Corporation, Ringwood, Ill., expanded in twenty-one years from a two-man laboratory to a major manufacturer of organic chemicals and photographic processing formulations. Dr. W. S. Guthmann, F.A.I.C., is president.

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The Astin Affair

(Concluded)

THE recommendations of the AIC in connection with the Bureau of Standards were fulfilled by the recent restoration of Dr. Astin as director of the Bureau and by changes made in the Bureau's functions after study by the Kelly Committee, a group headed by M. J. Kelly of the Bell Telephone Company, appointed by the National Academy of Sciences.

In summary, the INSTITUTE in April directed a letter, through AIC President Work, to President Eisenhower, urging that a committee of eminent scientists review the functions of the Bureau and that Dr. Astin should not be dismissed hastily without a hearing. The AIC at its annual meeting in May adopted a similar resolution, which was sent to the Kelly Committee, to the Senate's Select Committee for Small Business, to Secretary Weeks and to the President. Other societies made known their protests. This cooperation by scientific and professional groups succeeded in bringing a scientific approach to the matter and the appointment of a committee of scientists to analyze the Bureau's functions.

President Work has stated that "the INSTITUTE, as a wholly professional group acted promptly in pointing out that a challenge of scientific integrity is a serious one, needing definite proof; in asking that a committee of scientists review the functions of the Bureau, and in reminding those concerned that questions requiring scientific evidence for their solution be resolved on that basis."

Recognized: George P. Meade, F.A.I.C., as "Man of the Year" by the Carbohydrate Division of the American Chemical Society, in Chicago, September 9th. He is co-author of "Cane Sugar Handbook"; manager of the Colonial Sugar Company's refinery, Gramercy, Louisiana, and a director of The Cuban-American Sugar Company. He has spent more than fifty years in the sugar industry.

Announced: by Sidney J. Stein, F.A.I.C., president of Star Woolen Company, Cohoes, N. Y., a new nylon garnet designed to blend with cotton in the production of denim.

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Appointed: John Beekman Rust, F.A.I.C., as research director of Shulton, Inc., 630 Fifth Ave., New York 20, N. Y., toiletries manufacturer. Mr. Rust was formerly vice president and research director of Montclair Research Corp. Previously he was with Ellis-Foster Company. Diversification in the field of fine-chemicals research has been under way for five years at Shulton Inc., under the supervision of George Schultz, president, Stephen Joffre, F.A.I.C., director of organic research, and Warren Dennis.

New Corporation: Formed by Olin Industries, Inc., and the Mathieson Chemical Corp., to be known as the Matholin Corporation, to manufacture, sell and conduct research on hydrazine. It will acquire Mathieson's new hydrazine plant at Lake Charles, La. John M. Olin, president of Olin Industries, Inc., is president of Matholin.

To Europe: Dr. Emil Ott, F.A.I.C., director of research of Hercules Powder Company. He represented the American Chemical Society at the 26th International Congress of the Societe de Chimie Industrielle, (he is president of the American section of the French society) where he spoke, June 26th, on "From Test Tube to Commercial Plant." During his two-month trip, his schedule included visits to Switzerland, Germany, France, The Netherlands, England, Denmark, and Sweden, where he represented the United States at other scientific meetings, or conferred with European chemical industry executives.

Underway: Construction of a new unit at Calvert City, Ky., to produce BHC, for Pennsylvania Salt Mfg. Co., Philadelphia 7, Pa.

Elected: President of Chicago Technical Council, Clifford A. Hampel, F.A.I.C., chemical engineering consultant of Homewood, Illinois. Dr. Edmund Field, F.A.I.C., of Standard Oil Company (Indiana) was elected treasurer.

Purchased: By American Plastics Corp., subsidiary of Heyden Chemical Corp., New York, N. Y., the Reinforced Plastics Division of Auburn Button Works, of Auburn, N. Y.

Communications

Suggestions for the Handicapped

To the Editor:

This letter concerns the chemist in Red Oak, Iowa, suffering from *Fredricka Ataxia.*

Apparently, the work must be in writing or in library searching. I would suggest he inquire of *Chemical Abstracts,* especially for the abstracting of French Journals.

In addition to *Chemical Abstracts* there are a number of private abstracting services springing up. I cannot recall any right now, but they come across my desk every so often.

These are the thoughts that have come to me at the moment. I will pass on to you any further ideas.

—Dr. Philip T. Paul, F.A.I.C.

To the Editor:

This is in reference to the letter in The Chemist, 30, 395 (1953) regarding an incapacitated chemist.

Since the war there has been an increasing demand for literature chemists in various fields of specialization. Furthermore the number of abstracting services in petroleum, high polymers, textiles and other subjects has been growing. This, as we all know, is far from routine work.

Considering everything, including the linguistic abilities of our colleague, I am wondering whether something along the above lines would not be the best bet. This may already have been suggested by others. I myself am not directly involved in literature chemistry and therefore hesitate to make more concrete suggestions as to companies and institutions to be approached. However some members of our Institute, I am sure, will be glad to advise.

Finally, the gentleman should be congratulated on writing such a fine letter.

—Dr. Robert Simha, F.A.I.C.

To the Editor:

Possibly some of these thoughts would be of interest to physically handicapped chemists:

(1) Service to small companies through literature searching, with the companies supplying the subscriptions to the necessary technical publications.

(2) Patent reviews, again with the companies supplying the patents.

(3) Along the same lines, a bulletin service to small companies.

(4) Technical re-writing, where technical articles could be interpreted for the layman.

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(5) Adviser to advertising agents or departments.

(6) Consultant by way of information to small manufacturers in his field of chemistry.

(7) Preparation of book reviews, which might permit him to build up a personal library.

(8) Compilation of chemical statistics.

(9) Preparation of articles for encyclopedias or books of general information.

(10) Semi-technical articles for publications, such as local newspapers, etc.

—Doris Eager, M.A.I.C.

To the Secretary:

I am deeply grateful that you would publish the letter about my partially disabled chemist friend . . . If anything beyond a direct applicant-to-management contact can find work for him your idea certainly should do it.

It occurs to me that your idea is much bigger than this single problem. There must be a greater need today than ever for chemists. And perhaps there are more partially disabled chemists than ever. Could your idea for bringing attention to this single real incident help management see new ways of using this potential source of labor — the portion which cannot show up at the lab to "punch the time clock?" That may have been part of your insight . . .

My letters were sent to twelve men. Six have already answered. One definite offer of work — occasional jobs as an abstracter of articles on chemistry — was made. There was also a second tentative offer (translating). There were two suggestions which most probably will lead to tangible work (proof reading and compilation). Since he does not have access to a good library the abstracting he will be able to do may be limited. Proof reading seems to fit his remaining abilities best . . .

We're both grateful to you.

—King Park
Route No. 1,
Lombard, Illinois

Note: Additional suggestions for chemical occupations for the disabled may be sent directly to Mr. Park, whose address is above. A copy of the letter will be appreciated by The Chemist, so that a file may be on hand for future inquiries of this nature.

Observation

To the Editor:

The manner of living and the methods of doing things are more likely to be the real reasons for discrimination, rather than differences of religious beliefs or racial lines.

—Dr. William R. Sullivan, F.A.I.C.

The Chemist Reprinted

To the Editor:

We are interested in publishing, either in whole or in part, the two papers (by Dr. Henry B. Hass and Robert L. Taylor) on public relations for chemists.

—*Chemistry in Canada*

To the Editor:

We are about to print (in 1953) a pamphlet on Marston Taylor Bogert, (Hon. AIC) who was born and raised in Flushing, N. Y. . . . THE CHEMIST has an exceptionally good article about him by Florence E. Wall in the issue of April 1936. We would like . . . to use this article in our issue on Dr. Bogert.

—Flushing Historical Society

Note: *Science*, June 12, 1953, carries excerpts from "Avenues of Service," by Bernard E. Schaar, from the Feb. 1953, CHEMIST.

The Percolator, February, 1953, published "Chemists are Human Beings," by Dr. Sidney D. Kirkpatrick, from the Jan. 1953, CHEMIST.

(For other recently reprinted articles, see September CHEMIST, page 451-52, and July, page 368.)

Honored: Carleton H. Rose, F.A.I.C., with the Award of Merit, by the American Society for Testing Materials. The citation reads: "To Carleton Higbee Rose, manager of the Washington, D.C. office of the National Lead Company, recognizing distinguished service to the Society, especially in Committee D-1 on Paint, Varnish, Lacquer, and Related Products, of which he was assistant secretary for two years, later secretary for four terms and where he has contributed to the work of many subcommittees."

Elected: Emmett Scott Carmichael, F.A.I.C., of Socony-Vacuum Oil Co., as chairman of the New York Section of the American Chemical Society. He succeeds Prof. Edward J. Durham, F.A.I.C., of New York University.

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Atomically Labelled: For the first time, Cortisone and hydrocortisone, with carbon 14, it was announced jointly by the National Institute of Health, Sloan-Kettering Institue and the Worcester Foundation for Experimental Biology. These materials are available without charge to investigators. Address request to Endocrinology Study Section, National Institutes of Health, Bethesda 14, Maryland. Funds made available by the National Institute of Arthritis and Metabolic Disease make possible this free distribution for research purposes.

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Appointed: Dr. William J. Sparks, F.A.I.C., as chairman of the Division of Chemistry and Chemical Technology of the National Research Council. He is director of the chemical division of the Standard Oil Development Company, Esso Research Center, Linden, N. J.

Elected: D. R. Pinnock, F.A.I.C., as president of the Drew Company of America, Inc., manufacturers of flavoring extracts at 351 Jay St., Brooklyn 1, N. Y.

Announced: By Consolidated Chemical Industries, Inc., the appointment of C. W. Mitchell as executive vice president of Nyotex Chemical Co., Houston, Texas.

Planned: New office building at Jesup, Georgia, by Rayonier, Inc., in connection with their $25 million chemical cellulose plant now being constructed there. Emanuel J. Johnson has been appointed purchasing agent for the southeast area, with headquarters to be at the new office.

Elected: Dr. Gustav Egloff, Hon. AIC, as honorary fellow of the Royal Society of Edinburgh, Scotland, a society instituted by royal charter in 1783 for the promotion of science and literature.

Appointed: Merton B. Smith, F.A.I.C., as technical director of the Zeolite Chemical Co., Medford, N.J. He was formerly with Davis Nitrate Company.

Expansion: Planned by Devoe & Reynolds Company, at its Beckwith-Chandler Division, Newark, N. J.

Moved: The W. H. Brady Co., manufacturers of self-sticking industrial products, to 727 West Glendale Ave., Milwaukee 12, Wis.

Announced: By Dr. Clyde Williams, F.A.I.C., president of Battelle Institute, Columbus, Ohio, the appointment of Dr. Edward L. Cropa, F.A.I.C., as chief chemical consultant. He was formerly vice-president and chemical director of the chemical division of the Borden Company.

To Egypt: Dr. Lawrence W. Bass, F.A.I.C., where he will be administrator of the Arthur D. Little, Inc., industrialization project for that country.

Appointed: Dr. Francis R. Holden, F.A.I.C., to the chemistry staff of Stanford Research Institute, Stanford, Calif. He will do atmospheric research and direct some of SRI's radiological programs. He was formerly with the U.S. Naval Radiological Defense Laboratory, San Francisco, Calif.

Established: A special research division for the development of chemical sealants, by the Permatex Co., Inc., of Brooklyn, N. Y.

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Apparatus consists of an automatic pipettor with pipette of Pyrex glass; Special screw cap adapter of polyethylene plastic; Non-solvent bottle.

Available in two sizes:

Total capacity pipette 2Ml:—slotted volume selector provides instantaneous setting for delivery at 2.5Ml-0.5Ml-1.0Ml-2.0Ml. Vernier adjustment may be quickly fixed to deliver fractions in hundreths. 2Ml pipettor supplied with 250 Ml bottle. Pipette is graduated to 2 Ml in 1/10 Ml's. Total capacity 5Ml. pipettes — slotted volume selector provides instantaneous setting for delivery at 2.5Ml-3.5Ml-4.0Ml-5.0Ml. 5Ml pipettor supplied with 500 Ml. Bottle. Pipette is graduated to 5Ml in 1/10 Ml's.

Capacity	2 ml	5 ml
No. 83322 Volupettor, Anodized finish	$6.75	$7.50
No. 83323 Volupettor, Chrome finish	7.25	8.00

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Released: Twenty-eight patents for public use by the United States Atomic Energy Commission. Request list from the AEC at Washington 25, D.C.

Formed: An Engineering Physics Department by Foster D. Snell, Inc., 29 West 15th St., New York 11, N. Y., consulting chemists and engineers. Walter L. Hardy is director of engineering and Joseph P. McGill is in charge of the department.

Established: "Tradebooks of Connecticut", 488 Winthrop Ave., New Haven 11, Conn., to supply all kinds of trade and technical books, and to locate hard-to-find technical books. Ray Jarmak, formerly of McGraw-Hill, is the founder.

Dedicated: Dow Chemical Company's new $42,600,000 research center of the Texas Division, in honor of Dr. William Reed Veazey, retired director, who has served Dow for thirty-seven years.

Prediction: That the conveyor industry will grow faster in the next fifty years than it has in the past half-century, by Thomas Robins who founded the Robins Conveying Belt Company in 1896 with an investment of $1,000. It was merged with Hewitt Rubber Company in 1945 to form Hewitt-Robins, Inc., Stamford, Conn.

Changed: The name of Edwal Laboratories, Inc., to The Ringwood Chemical Corporation, Ringwood, Illinois. Morton Schwarcz, F.A.I.C., formerly chief research chemist, is now new projects director of the corporation.

Elected: To the Executive Committee of the Pittsburgh Section of the American Chemical Society, Hugh F. Beeghly, F.A.I.C., of the Applied Science Section, Division of Metallurgical Research, Jones and Laughlin Steel Corporation.

Awarded: Honorary membership in Phi Lambda Upsilon to Dr. Charles A. Thomas, Hon. AIC, of Monsanto Chemical Company, and Dr. Ernest H. Volwiler, F.A.I.C., of Abbott Laboratories.

Exposition: Of Refrigeration and Air Conditioning will be held in Cleveland, Ohio, Nov. 9-12, 1953, at the Public Auditorium, sponsored by the Refrigeration Equipment Manufacturers Association.

To Chicago: The Plant Maintenance and Engineering Show, to be held Jan. 25-28, 1954, at the International Amphitheatre. It was formerly held in the East. Registration cards may be obtained from Clapp & Poliak, Inc., 341 Madison Ave., New York 17, N. Y.

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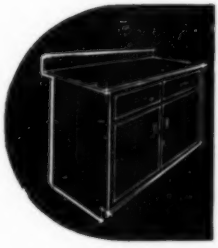

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Announced: By Carl A. Setterstrom, F.A.I.C., general manager of the Textile Fibers Department of Union Carbide and Carbon Corporation, the commercial spinning of colored Dynel fiber; the pilot plant production of Dynel containing an anti-static agent; an increase in production of Dynel staple, and the discontinuance of Vinyon N continuous filament yarns.

Purchased: By The United States Stoneware Company, Akron, Ohio, the Chemical Porcelain Division of the Illinois Electric Porcelain Company of Macomb, Ill.

Sales Agents: The Kornylak Engineering Corp., Jersey City 4, N. J., appointed by the A.B. Farquhar Co., of York, Pa., manufacturers of package handling equipment.

In Production: The new $8,000,000 electrolytic chlorine and caustic soda plant at the Calvert City, Ky., works of the Pennsylvania Salt Manufacturing Company.

Announced: By Howard Farkas, F.A.I.C., vice-president and general sales manager of The U.S. Stoneware Co., Akron, Ohio, the appointment of Kenneth L. Bullock as assistant sales manager of the Process Equipment Division, Akron.

Planned: A new laboratory and headquarters structure for Midwest Research Institute, Kansas City, Missouri.

Training Courses: In plastic welding offered by American Agile Corporation, P.O. Box 168, Bedford, Ohio.

Elected: W. C. Duane, M.A.I.C., as vice president of The Carney Company, Inc., Mankato, Minn., manufacturers of insulation. He joined the company in 1938 as a chemist and has been in charge of control and new product development.

New Laboratory: Being erected by Bjorksten Research Laboratories, on its Fish Hatchery Road property, Madison, Wisconsin. It will contain 15,000 square feet of laboratory space, for research in the plastics and polymer field.

Scholarships: Two to students who have completed two full years of undergraduate study in chemistry, chemical engineering, or related sciences, established at Illinois Institute of Technology by the Interchemical Corp. of New York, N. Y.

Undergraduate Scholarships: Twenty in the field of gas technology, offered annually by the Institute of Gas Technology, to train engineers for careers in the utility gas industry. For information write E. S. Pettyjohn, Institute of Gas Technology, Illinois Institute of Technology, Chicago 16, Ill.

Ambassador: Title conferred on Dr. James Bryant Conant, Hon. AIC, by President Eisenhower. Dr. Conant is United States High Commissioner to Germany. The new title recognizes improving relations with the Federal Republic of Germany.

Please Note: The business position of Dr. J. M. Tinker, F.A.I.C., listed on page 445, of the September CHEMIST, should have been given as director, Jackson Laboratory, E. I. du Pont de Nemours & Co.

New Plant: Being erected by Shell Chemical Corporation at Norco, Louisiana, to produce allyl chloride and epichlorohydrin. Its completion is scheduled for late 1954. Initially it will employ 150 workers.

COUNCIL

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President-elect, Donald B. Keyes
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Treasurer, Frederick A. Hessel

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Albin Warth, *Baltimore Chapter*

National Council Meetings

Meetings of the AIC National Council are scheduled to be held at The Chemists' Club, 52 East 41st St., New York, N. Y., at 6:00 p.m., on the following dates:

Nov. 11, 1953
Jan. 13, 1954
Mar. 10, 1954
Apr. 14, 1954

Addresses Wanted

If you know the present address of any of the following AIC members, please send it to the Secretary of the American Institute of Chemists, 60 East 42nd Street, New York 17, N. Y. The last address from which mail has been returned is shown for each member.

Charlotte Jane Backer
635 *West Warren Avenue, Apt.* 11
Detroit 1, *Michigan*

Joseph J. Balassa
4155 *Wilke Way,*
Palo Alto, California

Davis Monroe Batson
2211 *Washington Avenue*
Silver Spring, Maryland

Isidor Mayer Bernstein
18 - 86th *Street, Brooklyn, New York*

Mrs. Louis J. Byron
274 *Sharpe Avenue*
Staten Island 2, *N. Y.*

Joseph S. Chamberlain
4212 *Parkmond Avenue*
Baltimore 6, *Maryland*

Thomas W. Davis
U.S. Naval Ordnance Test Station,
Inyokern, China Lake, California

Ernst A. Hauser
573 *Washington Street*
Brookline 46, *Massachusetts*

Rowena G. Hodge
University of Redlands
Redlands, California

Eric B. Hotelling
1111 *Prospect*
Ann Arbor, Michigan

Ralph W. Kilb
Harvard University, 306A
Richards Hall, Cambridge 38, *Mass.*

Paul Melius
109 *N. Elmwood, Waukegan, Illinois*

Richard Miller
70 *Chester Circle, Raritan Gardens*
New Brunswick, New Jersey

Gary Lee Schott
University of Michigan
Ann Arbor, Michigan

Joseph John Screnock
Harding Rd. 5, *Sommerville, New Jersey*

Delores Sulzbach
2907 *Guilford St.*
Philadelphia 15, *Pa.*

Robert E. Townend
1921 *N. Park Avenue*
Philadelphia 22, *Pa.*

Karl Vorres
Biochemistry Department, University of
Southern California, Los Angeles 7,
California

Sanford Weil
5514 *S. Blackstone Avenue*
Chicago, Illinois

R. H. Wood
6729 *Haskell Avenue*
Van Nuys, California

AIC Activities

C. P. Neidig, F.A.I.C.

Chicago Chapter

Chairman, Herbert F. Schwarz
Vice-Chairman, Clifford A. Hampel
Chairman-Elect, Lloyd A. Hall
Treasurer, Albert S. Henick
Secretary, John Krc, Jr.
Armour Research Foundation
35 W. 33rd St., Chicago 16, Ill.
Representative to National Council,
Dr. Gustav Egloff

Luncheon Meeting

During the 124th Annual Meeting of the American Chemical Society, the Chicago Chapter was host at a luncheon given for out-of-town AIC members and friends.

The main attraction was Dr. Otto Eisenschiml, who in his familiar stance with his hands in and out of his vest pockets, gave an informal talk on Self-Inventory. To many of us who are familiar with Dr. Eisenschiml's informal talks, it appeared that he was "raising cain" again concerning the chemist and his role in the INSTITUTE. Despite this impression, the audience appeared to be both entertained and captivated by the speaker's ability to criticize. (Report of talk is given below.)

Self-Inventory

Every organization, be it a business enterprise, a scientific society or a group of men joined together for a definite purpose, should stop every so often and take inventory of itself. The AIC is no exception to this rule. To what extent, we should ask ourselves, are we following the plan on which the INSTITUTE was founded, and where do we go from here?

The purpose of our organization is set forth in our official booklet which plainly outlines our proposed activities and goals. On page 5 you may read that "A group of forward-looking chemists, in 1923, founded The American Institute of Chemists to stimulate professional thinking, to advance the professional position and to improve the economic status of

chemists in the United States." There is no mistaking these words. Yet, on the preceding page, the first three of ten avowed objectives strike out at different tangents. We intend, so it is set forth,

(1) To provide and enforce a code of principles of professional conduct which merits public esteem and justifies confidence in the integrity of the chemist;

(2) To establish and maintain a standard of proficiency of such excellence as to insure competent and efficient service;

(3) To secure an adequate basic training for the profession . . .

I protest, above all, against the awkwardness of making these three aims our first order of business. It seems to me that a code of ethics is the last thing in the world the chemical profession needs. In fifty-two years as a chemist I have not found more than two or three chemists whose professional behavior was objectionable. Yet, an outsider reading the top item on the list would think that we are a crooked lot, and that we ourselves admit it.

The second point is equally out of place, because it is obsolete. American chemists already have established a very high standard of proficiency, and are maintaining it. If anyone doubts it, let him look at our record in two world wars, when we promptly solved virtually all problems thrown at us by the War Department.

The third point, I should think, is one for the schools to worry about. If they turn out incompetent chemists, they will sooner or later have to close their doors.

Read these three points over. Aside from their ineptness, are they conducive to entice prospective new members into our fold? Would a man soliciting memberships to a grocerymen's association tell the grocer that what he needs most are better ethics, a higher standard of performance, and a basic training for future competitors, nine of whom will get awards for being especially smart? Before he got that far, he probably would be out on the street talking to himself.

What are our individual chapters doing along the lines planned by the founders? Meet, eat, listen to papers. Some of these papers, however, like the following, are really worth listening to. I picked them at random from programs of the last three years:

Restrictive Employment Contracts for Chemists.
Symposium of Public Relations.
Expert Court Testimony.
Personal Factors in Success and Failure.
How Selective Service will Affect Scientific Personnel.
Your First Job.
Advancing Yourself in the Chemical Industry.
Is There a Free Market for Chemists?

But now look at these papers, in which other chapters have indulged:

Acrylonitrile and Its Newer Derivatives.
Synthetic Rubber and Its Meaning.
Silica Gel.
Sorbitol — An Example of Chemurgy.
Research on Micro-chemistry.
The Chemistry of Ethylene Oxide.
Recent Advances in Chemical Genetics.

Will you tell me what these papers have to do with the professional and economic status of our profession? Or is it true that chemists can never talk anything else but shop?

This, then is the question: Shall we live up to our original purpose of striving for the material welfare of its members, or shall we play at being a miniature American Chemical Society? We can't do both and survive. A house divided against itself will not stand long.

I am not trying to tell any chapter what to do, but if it persists in the reading of scientific papers under the auspices of our INSTITUTE, it is violating its very spirit, and creates more harm than it knows.

A short time ago a midwestern city

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celebrated an anniversary, and I was invited to be the principal speaker. Prior to the meeting the chairman asked me how I wanted to be introduced — as a business executive, an author, or a historian. I told him neither: I wanted to be introduced as a chemist. When the proper time came, he said, "And now I am going to introduce the noted business executive, author and historian —." I was furious. After the meeting I asked him why he had ignored my wishes. "My friend," he replied, "I was doing you a favor. If I had introduced you as a chemist, half the audience would have left, and the other half would have paid no attention to you. No one has ever heard of a chemist talking anything but shop, and chemical shop talk is not what these people have come to hear."

Regrettably, our parent society at its annual meetings also allows papers to be presented which deal with scientific subjects, and thereby endorses this deviation from the real goal of the INSTITUTE. I do not deny that these papers are interesting and instructive; I only hold that they are being delivered before the wrong audience.

Fortunately, some of our chapters show a full understanding of what the INSTITUTE stands for by extending their activities beyond social gatherings and the reading of papers. One chapter disclosed the miserable salaries paid to the chemists of its municipality, and went to war on that issue. Another took up the case of a chemist, whose livelihood was being threatened by a contract he had signed with a former employer, and succeeded in adjusting things satisfactorily.

On the other hand, some cases which should arouse our attention apparently may go unnoticed. Recently we have had news that 400 scientists have been discharged by the Atomic Energy Commission in California. Should not this matter be investigated? How had they been hired, how had they been fired? How many of these are chemists? To throw this number of scientists on the market may produce a decided effect on the prevailing salary scale. Does the INSTITUTE propose to take action on this, even though it may have to curtail its never-ending stream of scrolls, medals, honorary memberships and student awards?

A few words about our official organ,

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THE CHEMIST. It is not the most exciting chemical magazine which comes to my desk, and in saying this I am not criticizing the editor, who mirrors the current trend, and moreover, must depend on voluntary literary contributions, which evidently are not forthcoming in adequate quantity and quality. Having been an editor, myself, I know that an appeal to the membership at large would be a waste of time. Contributors have to be drafted and pinned down to definite promises. I can visualize a CHEMIST which starts with an editorial, because to me a publication without an editorial is like a man without a head. I visualize the day when all technical material will be taboo; when all meaty papers read in chapters are published, when oratories will be trimmed, and when book reviews will be classified as shop talk. If suitable articles cannot be obtained from our own members, they should be copied from sectional publications, newpapers or periodicals. Debates on current issues, with a rigid restriction on personal abuse, would instill new life into the columns.

At present chemists willing and able to contribute worthwhile articles are discouraged, because they must write for a comparatively small audience. To remedy this shortcoming, I recommend that reprints be made of important contributions and sent to sectional publications and other papers with a suggestion to copy it. Reciprocal courtesy should be extended to interesting papers appearing in other publications, which in turn would improve the quality of their contributions. In this way, for a small outlay of money, we would benefit all chemists, increase the prestige of our organization, and give

our membership committee helping hand.* If necessary, the needed funds could be obtained by cutting out the annual medals for students. In my opinion, they constitute a deplorable display of super-altruism and a squandering of good money.

To cite an example of a really meaty paper: Ten years ago one of our chapters, after months of hard work, worked out an ideal employment contract, which was published in THE CHEMIST. So far as I know, it was never commented or acted on. It was not discussed in any chapter meeting, not even by the chapter in which it had originated. No other paper republished it. If this contract had been reprinted and broadcast, it might have helped to solve a vexing problem which plagues many of us, and deserves serious consideration.**

You may have noted that in my remarks I have mentioned no names, nor have I have identified the chapters to which I have referred. I have followed the example of the British lord, who was asked by the Queen to name the three most beautiful women in England. Without hesitation the lord responded: "The first one," he said, "is your Majesty; the second is my wife; the third — the third I need not name, because she knows very well that I mean her."

*For the titles of articles recently reprinted from THE CHEMIST, see September issue, pp. 451-52, and this issue pp. 478-9.

**In fairness to the authors of this report, several hundred reprints were made and distributed. It was printed in 1946; and though the reprints and that issue are both exhausted, we still get requests for them!

Washington Chapter

New Officers

Chairman, Alexander Leggin
Vice Chairan, Paul E. Reichardt
Treasurer, John Williams
Secretary, Wesley Koster, National Production Authority, Washington 25, D.C.
Representative to National Council, Alexander Leggin

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Western Chapter

Chairman, Peter J. Stupin
Vice Chairman, Dr. Kenneth Newman
Treasurer, Carleton F. Smith
Secretaries: Blanche C. Simons, 718 N. Fairfax Ave., Los Angeles 46, Calif.
Tom Rollins, Keldon Research, Los Angeles 54, Calif.
Representative to the National Council: Dr. L. F. Pierce

Change of Name

The Western Chapter was formerly known as the Los Angeles Chapter. At the September meeting of the National AIC Council, the request of the Los Angeles Chapter, that its name be changed to Western Chapter, was granted as this name more properly describes its geographical coverage.

Chairman: Dr. William J. Sparks, F.A.I.C., of Standard Oil Development Co., who was designated a delegate and chairman of the U. S. Delegation to the Seventeenth Conference of the International Union of Pure and Applied Chemisry, at Stockholm and Uppsala, Sweden, July 29th to Aug. 7th.

Moved: The National Vitamin Foundation Inc., to 15 East 58th St., New York 22, N. Y.

Will You Come

Oct. 1, 1953. Los Angeles Chapter. Elks Club, 607 S. Park View St., Los Angeles, Calif. Social hour 6 p.m. Dinner 7 p.m. $3.40. Speaker: Dr. Robert E. Vivian, dean of the College of Engineering of the University of Southern California. "Around the World for M.S.A." Dr. Vivian's talk covers his service as chemical production specialist for the U.S. Mutual Security Agency.

Oct. 1, 1953. Pennsylvania Chapter. The Engineers' Club, Philadelphia. Dinner 6:30 p.m. "Panel Discussion on Professionalism." Dr. R. A. Kirk, Brooklyn Polytechnic Institute, moderator; Dr. A. Gerod, Hahnemann Medical School; Lawrence A. Flett, National Aniline Division, and others.

Oct. 9, 1953. Chicago Chapter Award of the 1953 Honor Scroll to Dr. Hilton Ira Jones, F.A.I.C. Dinner, Furniture Club of America. Speakers include Dr. Roy C. Newton, F.A.I.C. and Chester Gould.

Oct. 14, 1953. Washington Chapter. Luncheon, Bonat's Restaurant, Washington, D.C. 12:15 p.m. Speaker: Dr. Richard L. Kenyon, editor, *Journal of Agricultural and Food Chemistry*, on "The Chemical Profession in Europe."

Oct. 22, 1953. New York Chapter. Stouffer's Restaurant, 540 Fifth Ave., New York, N. Y. Opener meeting. Dinner 6:30 p.m. Speaker, Dr. Walter R. Smith, F.A.I.C., of Godfrey L. Cabot, Inc., Boston, Mass. Subject, "The Missing Lambda Constant," including an imitation of a famous chemist doing a long mathematical derivation, but at the end realizing with dismay that he has omitted the Lambda constant. For reservations: Write Shepherd Stigman, c/o Foster D. Snell, Inc., 29 West 15th St., New York 11, N. Y. (Dinner $3.00).

Oct. 30, 1953. Ohio Chapter. Mayflower Hotel, Akron, Ohio. Reception 6:00 p.m. Dinner 7:00 p.m. Informal. Presentation of Honorary AIC Membership to Dr. Ray P. Dinsmore, F.A.I.C., vice president, Goodyear Tire & Rubber Co. Welcoming address: Chairman, Dr. Norbert A. Lang. "Personal Attributes of Dr. Dinsmore," Dr. A. A. Somerville, vice president of R. T. Vanderbilt Co. "Accomplishments of Dr. Dinsmore," Dr. Albert J. Gracia, Manager of Goodyear Atomic Corp. President Work will make the presentation. Reservations: Harold M. Olson, The Harshaw Chemical Co., 1945 E. 97th St., Cleveland 6, Ohio. Dinner: $5.00. Reception: courtesy Goodyear Tire and Rubber Company.

Nov. 11, 1953. Ohio Chapter jointly with the Cleveland Section of the American Chemical Society, Alpha Chi Sigma, The Electrochemical Society and the American Institute of Chemical Engineers. Hollenden Hotel, Cleveland. Annual dinner of the Chemical Profession in Cleveland. Speaker, Prof. Harold C. Urey, The Institute of Nuclear Studies, University of Chicago, "Cosmic Chemical Engineering." Information: Edward G. Bobalek, Dinner Committee, Secretary, Case Institute of Technology, Cleveland 6, Ohio.

Nov. 18, 1953. New England Chapter. Faculty Club, MIT. Presentation of Honorary AIC Membership to Prof. Walter G. Whitman. Reservations, Dr. A. W. Fisher, Jr., Arthur D. Little, Inc., Cambridge 42, Mass.

Dec. 3, 1953. New York Chapter. Joint meeting with American Chemical Society. Dinner at Carbide & Carbon Cafeteria, 30 East 42nd St., New York, N. Y. Speaker: Dr. Robert Gunning, "How to Improve Your Technical Writing."

Dec. 3, 1953. Pennsylvania Chapter. Penn-Sheraton Hotel, Philadelphia. Honor Scroll Award to Dr. Hugh W. Field, vice president and manager of research, Atlantic Refining Co.

For Your Library

The Furans

By A. P. Dunlop and F. N. Peters, Reinhold Publishing Corp. 1953. 867 *pp.* $18.00.

For the first time since oat hulls became a valuable raw material, industrial research personnel now have a complete study of furfural and its derivatives. Two of the pioneers in furfural research who have also played a vital part in the phenomenal development of this comparatively new chemical industry, have prepared this monograph, bringing to the task their practical commercial experience allied with a thorough understanding of the chemical problems involved.

In the first section of the book, comprising over seven eighths of its bulk, the chemistry of the furan compounds is treated in detail, while the second section is devoted to the industrial application of these substances, including nylon, lysine, dihydropyran, solvent application, and alcohol resins.

This is an unusually valuable volume. Its authors have been in a position to know their subject inside and out; they also know how to present information in a way as interesting as it is accurate, and they make very graphic the challenge of the poly functionality of the furan compounds. Research personnel in the field will find here not only a comprehensive reference book but a real stimulus to new efforts.

—Dr. Frederick A. Hessel, F.A.I.C.

Rocks for Chemists

An Introduction to Petrology for Chemists and Students of Chemistry. By S. James Shand. Pitman Publishing Corp. 1952. 146 *pp.* 32 *plates. Price* $4.50.

Professor emeritus of geology at Columbia, the author sets out in this book to increase "the number of chemically-minded petrologers and of geologically-oriented chemists, with benefit to both sciences." Petrology, he says, is at a dead-end without chemistry since "a lively imagination is no substitute for the phase rule and the theory of solutions, "while chemistry is incomplete "without a knowledge of the reactions that take place on the earth's crust."

In his historical introduction, Mr. Shand reminds us that until the middle of the 19th Century, chemistry was largely concerned with minerals and rock, and he blames the fascination of synthetic organic chemistry, opened up by the work of J. W. H. Perkin in aniline dyes, for the abandonment of rock by the chemists to the geologists whose principal interest was much closer to paleontology than to the wonderland of rock formation.

The ensuing chapters deal with the numerous varieties of rock and describe their chemical composition. Well executed line-drawings and a series of photographs illustrate the text which is suggestive to the chemist of possible fields of research in rock and mineral geneses.

—Dr. Frederick A. Hessel, F.A.I.C.

Encyclopedia of Chemical Technology

Vol. 10. *Raymond E. Kirk, F.A.I.C., and Donald F. Othmer, F.A.I.C., Editors. The Interscience Encyclopedia, Inc.* 1953. *xvi* — 976 *pp. Price* $25.00.

This volume of the Encyclopedia may be considered as a completely representative sample of the series to date. The diversity of its subject matter and treatment is illustrated by the articles which range from a broad technical discussion of Pentaerythritol, a general article on Plasticizers, to a theoretical articles on Polymers. Altogether, the first article is on Pentaerythritol and the last on Polymethine Dyes. The beautiful typography and make-up of the volume are the same as in previous volumes in the series. Almost all of the articles are both informative and authoritative. However, the introduction to the chapter on Petroleum, Its Origin, by Benjamin T. Brooks, the article on Plasticizers by Arthur K. Doolittle, and the article on Plasma Expanders by Edwin J. Pulaski are especially commendable. The theoretical discussion of Polymers by Herman Mark needs, of course, only the mention of his name. On the other hand, the article on Phthalocyanine Dyes by K. C. Johnson is notable rather for its omissions than for its content. In particular, there is no indication in the article of how these dyes are made.

To expect perfection in an effort which involves the contributions of so many diverse individuals and control of so many fields of knowledge by a merely human board of editors is beyond reasonable expectation. The flaw points up that for its general clarity of exposition, its broad coverage and wide utility, the Encyclopedia is indispensable to any private or quasi-public library.

—KARL M. HERSTEIN, F.A.I.C.

Practical Clinical Chemistry

By A. Hiller. Charles C. Thomas. 1953. *266 pp.* 6¼" x 9¼". $6.50.

This book is written mainly for technicians. The methods have been well selected. They are the procedures used in hospital clinical laboratories. Many of the methods have been simplified and made more explicit. This volume should be very helpful to the laboratory technicians in their daily routine chemistry work.

—DR. HENRY TAUBER, F.A.I.C.

Chemical Books Abroad

RUDOLPH SEIDEN, F.A.I.C.

Librairie Armand Colin, Paris: *La Spectroscopie d'emission,* by P. Michel; 1953, 224 pp. (67 ill.), Fr. 260.—A discussion of the principles of spectroscopy, the production of spectrums, and various analytical methods based on emission spectroscopy.

Walter de Gruyter & Co., Berlin W 35: *Massanalyse,* by G. Jander and F. Jahr; 6th ed., *Vol.* 1, 140 pp., *Vol.* 2, 139 pp., (paper covers) each DM 2.40.—A brief, illustrated review of the theory and practice of the classical and electrochemical methods of volumetric analysis.

Ferdinand Enke Verlag, Stuttgart: *Chemie und Technik der Vitamine, Vol.* 2, by H. Vogel and H. Knobloch; 3rd ed.—In the April, 1951, issue of THE CHEMIST, Vol. 1—dealing with the fat-soluble vitamins—was discussed; the second volume, dedicated to the water-soluble vitamins, will appear in 6 parts of 160 pages each (at DM26 each). *Part* 1 is a compilation of an enormous quantity of facts and literature as well as patent references concerning thiamine and riboflavin. • *Parts* 2-7 of *Chemische Textilfasern, Filme und Folien,* announced in THE CHEMIST in April, 1952 (160 pages each, at DM 20 each), continue the very thorough discussion of chemical textile fibers, starting with copper rayon and following with well-illustrated treatises by experts on viscose, alginate fibers, fibers made from proteins, glass, and synthetic materials (e.g., polyvinyl chloride, polyamides, etc.); finally the sizing, dying, printing, finishing, washing, bleaching, and chemical as well as mechanical testing of fibers are discussed in detail.

Editio Cantor, Aulendorf/Wuertt.: *Mikroanalyse organischer Arzneimittel und Gifte,* by R. Opfer-Schaum; 1953, 83 pp., paper covers DM 4.80.—An illustrated description of equipment and procedures for the micro-determination of melting point and optical refraction; they are useful for the identification and purity testing of organic chemicals, especially pharmaceuticals and poisonous materials in body fluids and organs. • *Die Anfaenge der chemisch-pharmazeutischen Industrie, Vol.* 2, by W. Vershofen; 1952, 120 pp., DM 13.50.—A history of the predecessor of the German chemical industry: the pharmaceutical industry of the period 1834-1870. The arrangement of the text is neither chronological nor in any other manner systematic and this, no doubt, impairs the value of the book. • *Vademecum fuer Pharmazeuten,* by R. Schmidt-Wetter; 1949, 240 pp., paper covers DM 8.—A compilation of well selected, brief articles and tables of interest to practicing pharmacists and pharmaceutical chemists.

Something New

"Fire Safeguarding Warehouses." Booklet. The National Board of Fire Underwriters, 85 John St., New York 38, N. Y.

"Piercing the Unknown." 16 mm color-sound film. Information. International Business Machine Corp., 590 Madison Ave., New York 22, N. Y.

"Safe, Low cost Radioisotopes." Information. Fisher Scientific Co., 717 Forbes St., Pittsburgh 19, Pa.

"Research in Plastics." Booklet. Manufacturing Chemists Association, Inc., 5413 Empire State Building, New York 1, N. Y.

"Vacuum Furnaces and Their Application to the High-Vacuum Processing of Metals." Bulletin. F. J. Stokes Machine Co., Vacuum Equipment Div., 5500 Tabor Rd., Philadelphia 20, Pa.

"Witco Continex FEF (Fast Extrusion Furnace Black) in Natural and Chemical Rubbers." Bulletin 53-5. Witco Chemical Co., 260 Madison Ave., New York 16, N. Y.

"Sulfur — A Raw Material Survey." Booklet. Midwest Research Institute, Kansas City, Mo.

"Air Pollution Abatement Manual." Bibliography — Appendix 2." 20 pages, 0.35. Manufacturing Chemists Association, Inc., 5413 Empire State Building, New York 1, N. Y.

"Light Bulb Changers, Insulated Aluminum Poles and Attachments." J. B. Sebrell Corp. 300 S. Los Angeles St., Los Angeles 13, Calif.

"Manual of Laboratory Safety." Fisher Scientific Co., 717 Forbes St., Pittsburgh 19, Pa.

"Time-Cycle Controllers." Bulletin No. C305. The Bristol Co., Waterbury 20, Conn.

"Laboratory Reagents, Fine Organic Chemicals." Booklet. Jasonols Chemical Corp., 1085 Myrtle Ave., Brooklyn 6, N. Y.

"List of Publications." National Bureau of Standards, U. S. Dept. of Commerce, Washington 25, D.C.

"Model P-104 All-Purpose Centrifugal Pump." Folder. Kenco, Incorporated, 1125 North Ridge Road, Lorain, Ohio.

"Photovolt Portable pH Meter." Information. Photovolt Corp., 95 Madison Ave., New York 16, N. Y.

"New Product Data On Acids and Ammonium Hydroxide." Bulletins. J. T. Baker Chemical Co., Phillipsburg, N. J.

"Water Stills." Bulletin No. 950. Precision Scientific Company, 3737 W. Cortland St., Chicago 47, Ill.

"Zizinia Packaged Unit Spray Dryers." Booklet. Foster D. Snell, Inc., 29 West 15th St., New York 11, N. Y.

"Pre-printed Labelon Tape for Drafting." Information. Labelon Tape Co., Inc., 450 Atlantic Ave., Rochester 9, N. Y.

"Howe Truck Catalog." Catalog. The Howe Scale Co., Rutland, Vermont.

"Product Control Through Infrared Analysis." Booklet. The Perkin-Elmer Corp., Norwalk, Conn.

"The Palo Retort." Publication. Palo Laboratory Supplies Inc., 81 Reade St., New York 7, N. Y.

"Coleman Certified Buffer Tablets." Bulletin. Coleman Instruments, Inc., 318 Madison Street, Maywood, Ill.

"PLX Series Storage Batteries." Information. The Electric Storage Battery Co., Box 8109, Philadelphia 1, Pa.

"Multi-Purpose Magnetic Probe." Information. General Scientific Equipment Co., 2700 West Huntington Street, Philadelphia 32, Pa.

"New Roura Drop-Bottom Container." Information. Roura Iron Works, Inc., 1401 Woodland Ave., Detroit 11, Mich.

"Facts Book — The Chemical Industry." Summary and information, well-indexed. 108 pp. 6" 9". $1.00. Manufacturing Chemists' Association, Inc. Woodward Bldg. 15th & H Sts. N.W., Washington 5, D.C.

"New Type Spigot for 5 gal. cans." Information. Scientific Glass Apparatus Co., Inc., Bloomfield, N. J.

Condensates

Ed. F. Degering, F.A.I.C.

In 1952, $317,610,000 were obligated for research and development at non-profit institutions, of which 88 per cent went to educational institutions. The total was divided as follows: $246,532,000 for applied research and development and $71,078,000 for basic research. These proportions are somewhat disturbing for they indicate a growing tendency upon the part of universities and colleges to concentrate on the more practical problems of science. Normally and traditionally such institutions conduct research studies most closely related to their primary educational functions.

The new type of penicillin, called Cephalosporin N, is one of two antibacterial substances produced by a fungus of the species Cephalosporium. Cephalosporin N differs from common penicillins in its water-absorbing character and in its antibacterial activity. For example, it is equally active against a strain of Staphylococcus aureus, the germs which cause boils, and against Salmonella typhi, which causes typhoid fever.

Sooner or later a man, if he is wise, discovers that life is a mixture of good days and bad, victory and defeat, give and take. He learns that it doesn't pay to be a too sensitive soul; that he should let some things go over his head like water off a duck's back. He learns that he who loses his temper usually loses out. — *Sunflower Planet.*

The National Paint, Varnish, and Lacquer Association recommends that the navy get out of the paint business except in the field of antifouling ship bottoms and hot plastic paints.

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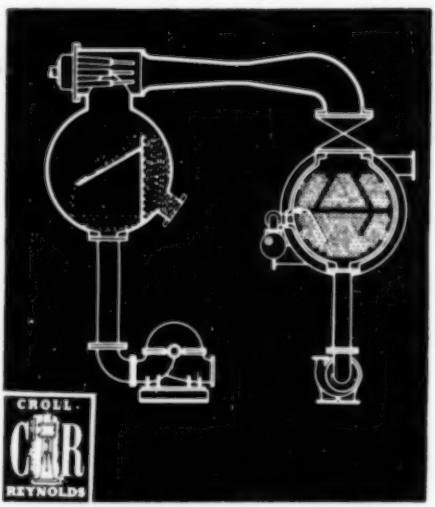

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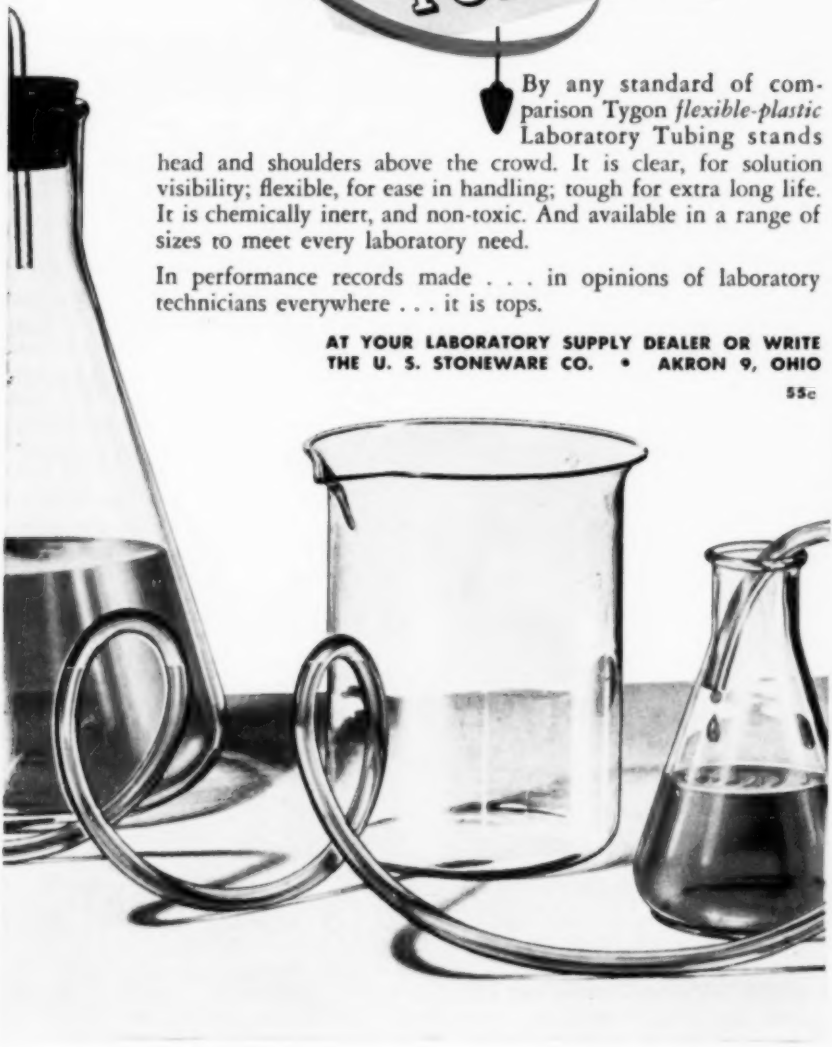
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